

ADMINISTRATIVE CONTRACTOR REQUIREMENTS

CONTRACTOR PORTABLE STRUCTURES

1.0 SCOPE

These Administrative Contractor Requirements apply to Contractor Office, Conference, lunchroom, tool, and similar portable structures of less than 5000 square feet located outside.

2.0 The following requirements shall apply unless a written exception is granted by Fluor Daniel Fernald Fire Protection.

2.1 The Contractor shall submit the type, and a sketch of each facility for approval by Fluor Daniel Fernald (FDF) prior to mobilization. The sketch shall show trailer dimensions, floor plans and distances from other structures.

2.2 Anchors and supports

Each portable structure shall have support and anchoring systems that will resist overturning and lateral movement of the unit in accordance with the OBBC and local codes. Support and anchoring equipment shall be in accordance with manufacturer's specifications (see Attachment A for approved anchoring method).

Alternate anchoring systems designed and stamped by a registered professional engineer shall be submitted for review by FDF.

2.3 Identification

Portable structure shall be identified by a unique, alphanumeric marking on each side of the unit (see Attachment B for illustration). FDF will provide the number.

The identification marking shall consist of a painted, 14-inch by 14-inch orange square, bordered by a 1-inch black border, and the identification marking in black characters, ½-inch or wider and at least 4 inches high within the orange square.

All other conflicting numerical identification shall be removed from the structure.

2.4 Skirting

Each portable structure shall have the area under the floor enclosed to prevent the accumulation of windblown debris and to prevent the space from being used for storage. Semi-Trailers used exclusively for storage will be required (at a minimum) to use orange snow fence or similar skirting to prevent accumulation of debris.

The skirting (other than Semi-Trailers) shall be of noncombustible material and without openings. The only exceptions are service access doors and screened

louvers installed for ventilation.

2.5 Pedestrian Access

Stairs, ramps, walkways, and platforms shall be constructed of weather-resistant lumber or other weather-resistant materials with permanent non-skid surface.. All stairs shall comply with OSHA 1926 Subparts X and NFPA 101 (refer to Attachment C for general stair requirements).

No means of egress from a portable structure shall discharge into a roadway or traffic flow area.

Stairs with platforms and handrails shall be provided for each exterior door.

Stairs, platforms, ramps, and handrails shall be arranged to resist movement.

2.6 Plumbing

Plumbing and sanitation facilities must meet state and local code requirements.

2.7 Electrical

All electrical conductors and equipment shall be in accordance with the latest edition of NFPA 70, and the "National Electric Code."

NOTE: NEC Article 305 (Temporary Wiring) shall not apply to any wiring for trailers.

NOTE: NEC Article 215 shall apply to all feeder circuits installed on site. Article 305-4(b) shall not apply.

All electrical conductors shall be copper.

NOTE: An exception is that aluminum conductors of equivalent ampacity may be used instead of number 4 AWG or larger copper service conductors. Only compression-type connectors shall be used for splices and termination. They should be accessible for periodic inspection. Joint compounds as recommended by the Manufacturer shall be used to assure conduction and to prevent corrosion.

All electrical circuits shall have a separate ground wire. The use of the trailer frame or other metal parts is not a permitted method of grounding. All conductive parts of the portable structure, frame, siding skirting, etc. shall be bonded (grounded) to the main circuit breaker box.

Any wiring presently being installed or installed after the portable structure has been manufactured shall be in steel conduit and surface mounted. Conduit shall not be utilized as the grounding path (separate grounding wire) is required. Wire molding is not permitted.

All installed breakers shall be permanently identified for their use.

Main service disconnects shall be located on the outside of the portable structure and clearly identified.

2.8 Heating and Cooling Systems

Heating and cooling equipment shall be UL listed or labeled, and installed in accordance with its listed design and appropriate standards.

Only electric units shall be installed.

2.9 Exits

All normally occupied portable structures shall have a minimum of two exits remote from each other unless the maximum occupancy is 10 persons or less and provided the common path of travel to the outside shall not exceed 75 feet.

The minimum width of any corridor, or main aisle-way exit passageway, or primary aisle-way shall be 44 inches.

The minimum width of any aisle serving to gain access to a corridor or exit passageway shall be 36 inches in the clear.

Passageways, aisles, corridors, etc. serving as accesses to a required exit shall not be used for any purpose that could interfere with their intended use including storage of boxes, file cabinets, desks, or trash containers.

No door opening in the means of egress shall be less than 32 inches in clear width.

Doors shall be arranged to be readily opened from the egress side whenever the structure is occupied.

Exits shall be marked by an NFPA-101 approved sign readily visible from any direction of exit access.

NOTE: An exception is the main exterior doors that are obvious and clearly identified as exits.

2.10 Vehicle Access

An emergency vehicle access road shall be provided to ensure the perimeter of a portable structure is not more than 100 feet from the nearest roadway.

All vehicle access roads shall be a minimum of 20 feet clear in width. Roads of less than 30 feet in width shall be posted as "Fire Lane No Parking".

Structures within 10 feet of a roadway shall be protected from impact vehicular traffic (i.e. traffic cones, bollards, concrete barriers).

Security fences, and similar man-made obstructions shall not restrict emergency access.

2.11 Placement

All complexes shall be located so that fire fighting equipment is not blocked from access to adjacent structures.

Portable structures shall not be located within 50 feet of a fire hydrant. All exterior portions of the structure shall be within 300 feet of a hydrant in a hydrated area, unless approved by FDF Fire Prevention.

Portable structures shall not be located over control valves, manholes serving underground utility systems, gas mains, water mains, or utility corridors.

Portable structures shall not be located beneath vital power lines/utilities or any power lines over 600 volts.

A portable structure shall be located so that it will not hinder the exiting of persons from any nearby area or block any required exit.

2.12 Separation Distances

Unless approved by Fire Protection, the required separation distance shall be based on the most hazardous condition and may vary given the actual use and size of the structures. Attachment D and NFPA 80A shall be used to determine minimum separation distances between fire areas. NFPA 80A shall be used to determine the required separation distances between a portable structure and a permanent building.

2.13 Automatic Alarm Systems

Fire alarms, Emergency Message System, and evacuation alarms shall be installed as required by 29 CFR 110.165. The use of a radio meeting requirements of Contract Part 8 will satisfy this requirement. This radio must remain in the structure and operational.

2.14 Interior Finishes

The interior finishes of all portable structures should comply with NFPA 101.

Fire retardant paint is not acceptable for flame spread reduction for interior finishes.

TRAILER STAIR SPECIFICATION

NOTE: When the specifications listed conflict with a mandated standard, the most stringent shall apply.

1. The platform and stair treads shall be substantially level ($\frac{1}{4}$ inch per foot) (NFPA 101 5-2.1.3.3).
2. The size of the outside stair platform shall be a minimum of 38 inches by 38 inches. (NFPA 5-2.1.3.3).
3. Each step shall be:

Maximum height of riser (step)	7 inches
Minimum height of riser (step)	4 inches
Minimum tread DEPTH	11 inches

There shall be no variation exceeding $\frac{3}{16}$ inch in the depth of adjacent treads or in the height of adjacent risers. The tolerance between the largest and the smallest tread shall not exceed $\frac{1}{8}$ inch in any flight. (NFPA 101 5-2.2.6.5).

4. All walking surfaces shall be protected by a permanent non-slip type construction. (NFPA 101 5-2.2.4.4).
5. All steps shall have complete hand rails on all open sides. The handrails shall be not less than 34 inches nor more than 38 inches above the tread, measured vertically to the top of the rail and constructed for a concentrated load of 200 pounds applied at any point and in any direction. (NFPA 101 5-2.2.6.5).
6. Personnel (guards) railings on the top platform shall be 42 inches high, and provide a midrail at 21 inches. Other railing(s) will be such that a sphere, with a diameter of 6 inches, cannot pass through any opening. (NFPA 101 5-2.2.2.6.6; 29CFR 1910.37(g)).
7. A firm solid landing at the base of the stair unit shall be utilized to provide reliable footing when exiting the stair unit. This landing may be the walkway /sidewalk or a concrete "patio" pad. This landing shall be as wide as the width of the stairs. (NFPA 101 5-2.2.4.3; NFPA 101 5-2.2.2.5).
8. The maximum distance between the abase of the door jam and the walking surface of the top platform shall be 6 inches. The step down is permitted to allow the stair unit to move during freeze-and-thaw cycle. (NFPA 101 5-2.1.3.3; NFPA 101 5-1.7.3; 29CFR 1910.37 (g)).
9. The maximum distance between the lowest stair riser and the ground landing shall be 7 inches. The normal distance shall be 7 inches but due to established sloping grades or other similar problems a variance of 2 inches may be permitted, with a minimum riser of 5 inches (NFPA 101 5-2.2.2.4).

SEPARATION DISTANCES

Portable Structure Exposing Wall Length, ft (m)	Minimum Separation Distance, ft (m)
10 (3)	20 (6)
20 (6)	30 (9)
30 (9)	35 (11)
40 (12)	40 (12)
50 (15)	45 (12)
60 (18)	50 (12)
More than 60 (18)	60 (18)

The following reductions or increases of separation distances in Table 1 are cumulative but the minimum distance shall not be less than 10 feet (3m):

1. 50% reduction for light fuel severity, e.g. 8000 BtU/ft² or less.
2. 50% less increase for heavy fuel severity, e.g. 160,00 BtU/ft² or higher.
3. 50% reduction for limited supply suppression system (i.e., Halon, CO₂, pressurized water tank, etc.)
4. 75% reduction for an automatic sprinkler system in exposing structure.
5. 75% reduction for exposure deluge system.